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REC'D 17 OCT 2000

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Concept House
Cardiff Road
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South Wales
NP10 8QQ

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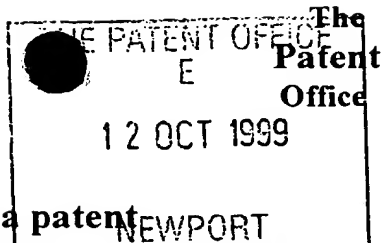
Signed

Dated 2 October 2000

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1 Oct 1977



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No Fee
12 OCT 1999 £483167-1 C03126
P01/7700 0.00 - 9923986.5

The Patent Office

Request for grant of a patent

(See the notes on the back of this form. You can also get an explanatory leaflet from the Patent Office to help you fill in this form)

Cardiff Road
Newport
Gwent NP10 8QQ

1. Your reference RBT/P300248GB

2. Patent application number **9923986.5**
(The Patent Office will fill in this part)

12 OCT 1999

3. Full name, address and postcode of the or of each applicant (*underline all surnames*)
Supreme Plastics Group Limited
300 Regents Park Road
Finchley
London N3 2TL

Patents ADP number (*if you know it*)

7283518001

If the applicant is a corporate body, give the country/state of its incorporation
United Kingdom

4. Title of the invention Plastics bags

5. Name of your agent (*if you have one*) W. P. Thompson & Co.

"Address for service" in the United Kingdom to which all correspondence should be sent (*including the postcode*)
Eastcheap House, Central Approach
Letchworth
Herts SG6 3DS

Patents ADP number (*if you know it*) 158003

6. If you are declaring priority from one or more earlier patent applications, give the country and the date of filing of the or of each of these earlier applications and (*if you know it*) the or each application number

Country	Priority application number (<i>if you know it</i>)	Date of filing (<i>Day/month/year</i>)

7. If this application is divided or otherwise derived from an earlier UK application, give the number and the filing date of the earlier application

Number of earlier application	Date of filing (<i>Day/month/year</i>)

8. Is a statement of inventorship and of right to grant of a patent required in support of this request? (*Answer 'yes' if:*
a) any applicant named in part 3 is not an inventor, or
b) there is an inventor who is not named as an applicant, or
c) any named applicant is a corporate body.
See note (d))

Yes

PLASTICS BAGS

This invention relates generally to plastics bags, and particularly to plastics bags which have been formed, filled 5 and sealed. The invention is also concerned with methods of manufacturing such bags to incorporate means by which they can easily be opened.

Plastics bags which have been formed, filled and sealed are often difficult to open because of the effectiveness of 10 the seal. In many cases, the pulling force needed on the sides of the bag to open the top seal is substantial.

It is an object of the present invention to provide means for more easily opening sealed bags, especially those which have been formed, filled with contents and sealed.

15 It is also an object of the present invention to provide a method of manufacturing a plastics bag to incorporate means for easy opening.

Broadly in accordance with one aspect of the present invention there is provided a plastics bag having a seal which 20 incorporates a tag within the seal which is such that it can easily be used to open an area of the seal.

Broadly in accordance with another aspect of the present invention there is provided a method of manufacturing a plastics bag which includes providing a tag within a seal 25 which closes the bag, the tag being such that it can be used to open an area of the seal.

The present invention can be used both with bags which incorporate a reclosable zipper seal along with the top seal, and also with bags which have a top seal only.

30 The tag which is used as the agent by which the seal can be broken and the bag opened is preferably a piece of

material suitable to be sealed to a host material, i.e. plastics film. One suitable material is polyethylene. Next to the PE layer 12 is a layer 14 to give the laminate strength. This can be of PET material. There is then a layer 5 16, for example of foil material, to give the laminate heat insulation properties. Next to this layer is a layer 18 of peel seal material. These layers are bonded together. A line of perforations 20 is provided along the length of the laminate material. These perforations can be holes or slits 10 through the laminate.

The laminate material can be stored on a roll. The laminate material is folded, as shown in Fig. 2, substantially in an "M" shape, with two outer webs and an inner tuck. The outer webs extend down beyond the tuck and the line of 15 perforations 20 is then at the bottom of the tuck. The material can be stored on a roll already doubled over about the perforation line 20 and with the tuck folded in and with the peel seal layers which are then facing one another welded together. The facing layers of peel seal material are sealed 20 together, as represented by the "crosses" in Fig. 2. Alternatively, the peel seal layers can be welded together at a subsequent stage in the manufacture of the bag.

A section of the folded laminate material 10 is fed into an applicator and is cut to length to make a tag 11 (Fig. 2). 25 Adhesive is then applied to the outer faces of the outer layer 12 along the opposing edges which extend beyond the tuck and the tag 11 is then inserted between the top flanges 22 of a cross web zipper 24 as shown in Fig. 2. The adhesive thus sticks the tag to the zipper.

30 The zipper 24 and tag 11 are then sealed to the host material 26 as shown in Fig. 3. The host material 26 is a

of the tag overlaid by seal 34, and by seal 36 if present, will give, allowing entry to the inside of the bag through the opened tag, as shown in Fig. 9. The opening of the peel seal material gives access through the top seal 34 and through the 5 zipper seal 36 if provided, directly to the interior of the bag. The opening can then be enlarged.

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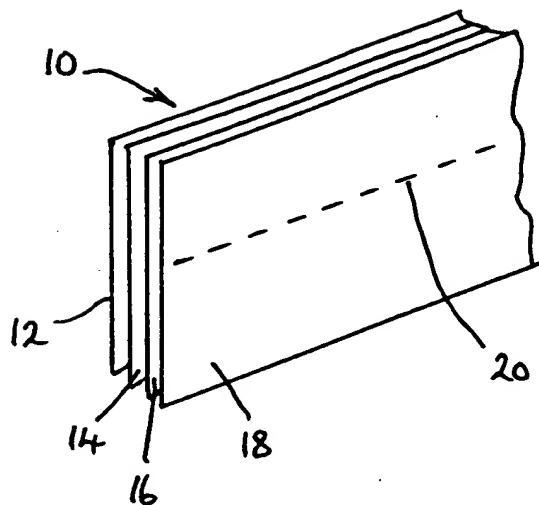


Fig. 1.

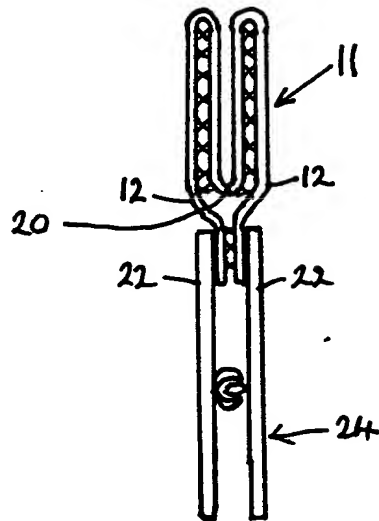


Fig. 2.

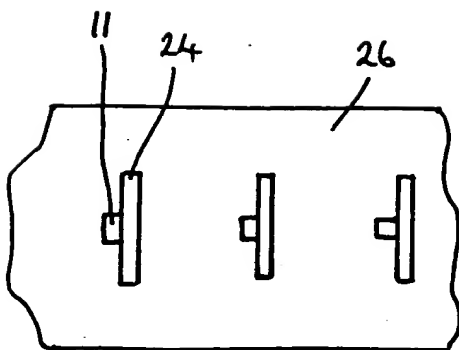


Fig. 3.

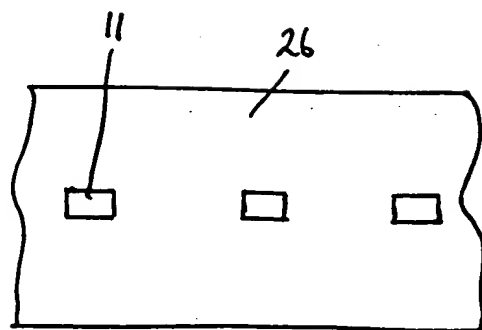


Fig. 4.

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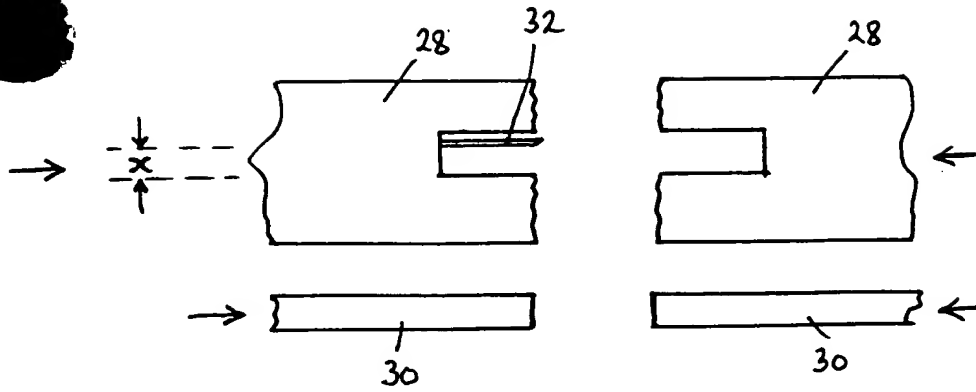


Fig. 5.

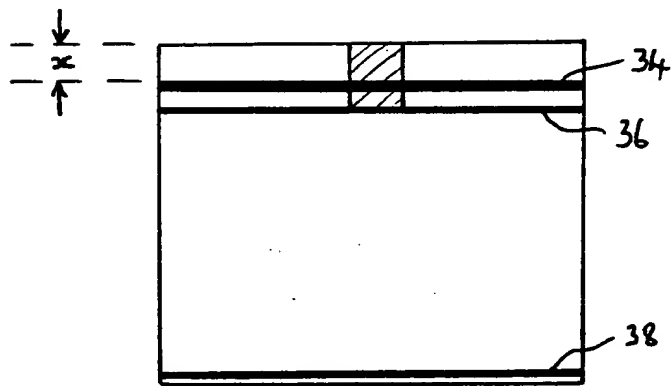


Fig. 6.

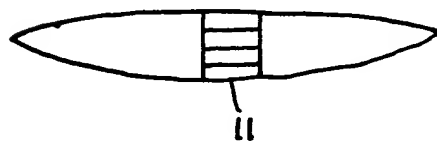


Fig. 7.

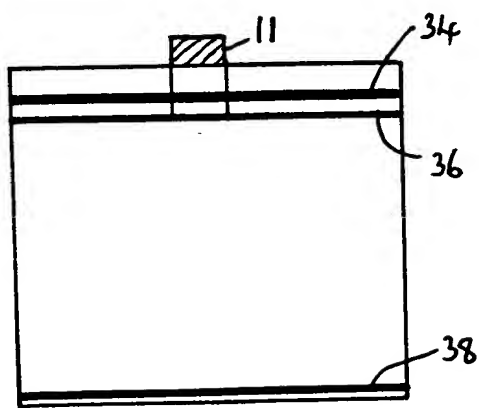


Fig. 8.



Fig. 9.

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